

IN THE CLAIMS

Please amend the claims as indicated by the revision status and revision marks below:

1. (CURRENTLY AMENDED) A subscriber line driver apparatus comprising:
an impedance bridge including impedances Z1 and Z2 coupled to a subscriber line;
a first pair of current drivers for driving a voice signal within a first frequency range onto the subscriber line, wherein within the first frequency range Z1 couples one of the first pair of current drivers to the subscriber line and Z2 couples the other of the first pair of current drivers to the subscriber line; and
~~a first pair of current drivers coupled to the impedance bridge for driving a voice signal in a first frequency range onto the subscriber line; and~~
a second pair of current drivers coupled to the impedance bridge for driving a data signal in a second frequency range onto the subscriber line, wherein the impedance bridge couples the second pair of current drivers to the subscriber line across an output impedance of substantially Z_1+Z_2 within the second frequency range.
2. (PREVIOUSLY PRESENTED) The apparatus of claim 1 wherein Z_1+Z_2 is approximately 100Ω .
3. (PREVIOUSLY PRESENTED) The apparatus of claim 2 wherein $Z_1 \approx Z_2$, wherein Z_1 is in a range of $40\text{-}60\Omega$.
4. (PREVIOUSLY PRESENTED) The apparatus of claim 1 wherein the first frequency range has an upper bound of approximately 4 kHz.
5. (PREVIOUSLY PRESENTED) The apparatus of claim 1 wherein the second frequency range has a lower bound greater than 25 kHz.

6. (PREVIOUSLY PRESENTED) The apparatus of claim 1 wherein the data signals are discrete multi-tone encoded signals.
7. (CURRENTLY AMENDED) The apparatus of claim 1 wherein the impedance bridge further comprises a first impedance Z1, a second impedance Z2, and a capacitor C1.
8. (PREVIOUSLY PRESENTED) The apparatus of claim 7 wherein a tip line of the subscriber line and one of the second pair of current drivers is connected to a first terminal of Z1, wherein a first terminal of C1 and one of the first pair of current drivers is connected to a second terminal of Z1, wherein the other of the second pair of current drivers is connected to a first terminal of Z2, wherein the other of the first pair of current drivers and a second terminal of C1 are connected to a second terminal of Z2.
9. (PREVIOUSLY PRESENTED) The apparatus of claim 1 further comprising:
an impedance synthesis circuit providing an impedance synthesis feedback signal to the first pair of current drivers, wherein within the first frequency range the output impedance across the subscriber line is controlled by the impedance synthesis circuit.
10. (CURRENTLY AMENDED) A subscriber line driver apparatus comprising:
an impedance bridge including a first impedance Z1 and a second impedance Z2 coupled to a subscriber line;
a first pair of current drivers coupled to the impedance bridge for driving a voice signal in a first frequency range onto the subscriber line through Z1 and Z2 respectively;
an impedance synthesis circuit providing a feedback signal to the first pair of current drivers; and

a second pair of current drivers coupled to the impedance bridge for driving a data signal in a second frequency range onto the subscriber line, wherein within the first frequency range an output impedance across the subscriber line is controlled by the impedance synthesis circuit, wherein within the second frequency range the output impedance is substantially Z_1+Z_2 .

11. (PREVIOUSLY PRESENTED) The apparatus of claim 10 wherein Z_1+Z_2 is approximately 100Ω .
12. (PREVIOUSLY PRESENTED) The apparatus of claim 11 wherein $Z_1 \approx Z_2$, wherein Z_1 is in a range of $40\text{-}60\Omega$.
13. (PREVIOUSLY PRESENTED) The apparatus of claim 10 wherein the first frequency range has an upper bound of approximately 4 kHz.
14. (PREVIOUSLY PRESENTED) The apparatus of claim 10 wherein the second frequency range has a lower bound greater than 25 kHz.
15. (PREVIOUSLY PRESENTED) The apparatus of claim 10 wherein the data signals are discrete multi-tone encoded signals.
16. (PREVIOUSLY PRESENTED) The apparatus of claim 10 wherein the impedance bridge further comprises a capacitor C_1 .
17. (PREVIOUSLY PRESENTED) The apparatus of claim 16 wherein a tip line of the subscriber line and one of the second pair of current drivers is connected to a first terminal of Z_1 , wherein a first terminal of C_1 and one of the first pair of current drivers is connected to a second terminal of Z_1 , wherein the other of the second pair of current drivers is connected to a first terminal of Z_2 , wherein the

other of the first pair of current drivers and a second terminal of C1 are connected to a second terminal of Z2.

18. (PREVIOUSLY PRESENTED) The apparatus of claim 16 wherein $Z1 \approx Z2$, wherein C1 is approximately 5 nF.